

Listing of Claims to Replace All Prior Versions of Claims in the Application

1. (previously presented) A method of generating an XML document comprising:

preparing a portion of an XML document;

sending said portion to a client before the XML document is entirely built;

and

repeating said preparing and said sending until the entire XML document is sent to a client.

2. (original) The method of claim 1, wherein said preparing comprises:

gathering data that is to appear in the XML document;

calling an emitter object;

passing the emitter object gathered data; and

formatting the gathered data into an appropriate XML syntax with the emitter object.

3. (original) The method of claim 2, wherein said gathering comprises using a data gathering object to gather said data.

4. (original) The method of claim 1 further comprising prior to said preparing, receiving a request for the XML document from the client.

5. (previously presented) A method of responding to an Extensible Markup Language (XML) request comprising:

receiving a request from a client for an XML document;

1 preparing a portion of a response to the request; and

2 sending the portion to the client before the XML document is entirely built.

3
4 6. (original) The method of claim 5 further comprising repeating said
5 preparing and said sending until an entire response has been sent to the client.

6
7 7. (original) The method of claim 5 further comprising repeating said
8 preparing and said sending until an entire response has been sent to the client, said
9 preparing of response portions taking place in a defined order.

10
11 8. (original) The method of claim 5 further comprising repeating said
12 preparing and said sending until an entire response has been sent to the client, said
13 preparing of response portions taking place in a defined order, wherein the
14 response comprises an XML multistatus response.

15
16 9. (original) The method of claim 5, wherein the response comprises an
17 XML multistatus response.

18
19 10. (original) The method of claim 5, wherein said preparing comprises:
20 gathering data for said response portion with a data-gathering mechanism;
21 and

22 formatting gathered data into an appropriate XML syntax with a data-
23 formatting mechanism.

11. (original) The method of claim 10, wherein said sending comprises sending the response portion to the client with a response-sending mechanism.

12. (original) The method of claim 11, wherein said response-sending mechanism includes a buffer for holding at least one response portion that is prepared by the data-formatting mechanism and further comprising:

defining a buffer threshold;

buffering said at least one response portion in the buffer; and

sending said at least one response portion to the client when the buffer threshold is reached.

13. (original) A computer-readable medium having a program which, when executed by a computer, performs the method of claim 5.

14. (previously presented) A method of responding to an Extensible Markup Language (XML) request comprising:

receiving a request from a client for an XML document;

gathering data that is to appear in a response to the client's request;

calling an emitter object and passing the emitter object the gathered data;

formatting the gathered data into an appropriate XML syntax with the emitter object; and

emitting formatted data from the emitter object, the emitter object emitting the formatted data in a manner in which an XML response can be sent to the client without having to build a hierarchical tree that represents the XML response.

1 15. (original) The method of claim 14 further comprising:
2 accumulating the emitted formatted data in a buffer; and
3 sending buffered data to the client when the buffer contains a defined
4 amount of data that is less than an amount that would constitute a complete
5 response to the client's request.

6
7 16. (original) The method of claim 14, wherein:
8 said calling comprises calling the emitter object multiple times; and
9 said emitting comprises emitting multiple amounts of formatted data.

10
11 17. (original) The method of claim 14, wherein:
12 said calling comprises calling the emitter object multiple times and in a
13 defined order; and
14 said emitting comprises emitting multiple amounts of formatted data.

15
16 18. (original) The method of claim 14, wherein said gathering comprises
17 gathering data that is to appear in a multistatus response.

18
19 19. (original) A computer-readable medium having a program which,
20 when executed by a computer, performs the method of claim 14.

21
22 20. (previously presented) A method of responding to an Extensible
23 Markup Language (XML) request comprising:
24 receiving an XML request from a client, the XML request containing a
25 Web Distributed Authoring and Versioning (WebDAV) request method;

1 determining the WebDAV request method that is contained in the client's
2 request;

3 creating a request method object for the WebDAV request method;

4 gathering data that is to appear in a response to the client's request with the
5 request method object;

6 calling an emitter object and passing the emitter object data that was
7 gathered by the request method object; and

8 generating a portion of a syntactically correct XML response with the
9 emitter object using the data that was gathered by the request method object before
10 the XML response is entirely built.

11
12 21. (original) The method of claim 20 further comprising sending the
13 response portion to the client.

14
15 22. (original) The method of claim 21, wherein the sending of the
16 response portion comprises doing so without building an entire hierarchical tree
17 structure that represents an entire response for the client's request.

18
19 23. (original) The method of claim 20, wherein said calling comprises
20 calling the emitter object a plurality of times for a given response.

21
22 24. (original) The method of claim 20, wherein said generating
23 comprises generating a plurality of syntactically correct XML response portions
24 and sending said response portions separately to the client.

25

1 25. (original) The method of claim 20, wherein said calling comprises
2 calling the emitter object a plurality of times and in a defined order for a given
3 response.

4
5 26. (original) The method of claim 20, wherein:
6 said calling comprises calling the emitter object a plurality of times for a
7 given response; and
8 said generating comprises generating a plurality of syntactically correct
9 XML response portions and sending said response portions separately to the client.

10
11 27. (original) The method of claim 20 further comprising:
12 buffering a plurality of response portions in a buffer; and
13 sending the plurality of response portions together to the client.

14
15 28. (original) The method of claim 27, wherein said sending of the
16 plurality of response portions comprises sending less than an entirety of a response
17 to the client.

18
19 29. (original) The method of claim 27 further comprising:
20 setting a threshold value on the buffer;
21 determining when the threshold value is satisfied by the response portions
22 that are buffered therein; and
23 responsive to the threshold value being satisfied, sending the buffered
24 response portions to the client.

1 30. (original) A computer-readable medium having a program which,
2 when executed by a computer, performs the method of claim 20.

3
4 31. (previously presented) An Extensible Markup Language (XML)
5 request processor comprising:

6 an XML response generator comprising:

7 a request-receiving mechanism configured to receive a request from a client
8 for an XML document;

9 a response-preparing mechanism coupled with the request-receiving
10 mechanism and configured to prepare only a portion of an XML response at a
11 time; and

12 a sending mechanism coupled with the response-preparing mechanism and
13 configured to receive response portions from the response-preparing mechanism
14 and to send the response portions to the client before the XML response is entirely
15 built, the sent response portions constituting less than an entirety of a response.

16
17 32. (previously presented) The XML request processor of claim 31,
18 wherein the response-preparing mechanism is configured to prepare response
19 portions and the sending mechanism is configured to send the response portions to
20 the client until the entire XML response is sent to the client.

21
22 33. (previously presented) The XML request processor of claim 31,
23 wherein the XML response that is sent to the client comprises a multistatus
24 response.
25

1 34. (original) The XML request processor of claim 31, wherein the
2 response-preparing mechanism is configured to prepare response portions in a
3 defined order.

4
5 35. (original) The XML request processor of claim 31, wherein the
6 response-preparing mechanism includes a data-gathering function that gathers data
7 that is to appear in a client's response, and a formatting function that receives data
8 that is gathered by the data-gathering function and formats the data into an
9 appropriate XML syntax.

10
11 36. (original) The XML request processor of claim 31, wherein the
12 sending mechanism includes a buffer for buffering response portions that are
13 received from the response-preparing mechanism, and wherein the buffer has a
14 defined threshold which, when satisfied, enables the sending mechanism to send
15 buffered response portions to the client.

16
17 37. (previously presented) An Extensible Markup Language (XML)
18 request processor comprising:

19 a data-gathering object to gather data that is to appear in a client response
20 and generate calls in a predefined order that contain the gathered data; and

21 an emitter object to receive calls that are generated by the data-gathering
22 object and format the data contained therein into an appropriate XML syntax,
23 wherein the emitter object is to emit a portion of the client response before the
24 client response is entirely built.

25

1 38. (currently amended) The XML request processor of claim 37,
2 wherein the emitter object is to selectively emit the portion of the client response
3 without having to build a hierarchical tree that represents the client response.

4
5 39. (original) The XML request processor of claim 38 further
6 comprising a buffer that is configured to receive response portions that are emitted
7 from the emitter object, buffered response portions being sent to the client when a
8 defined buffer threshold is satisfied.

9
10 40. (original) The XML request processor of claim 37 further
11 comprising a buffer that is configured to receive response portions that are emitted
12 from the emitter object, buffered response portions being accumulated by the
13 buffer and sent to the client when a defined buffer threshold is satisfied, the
14 buffered response portions comprising less than a complete response.

15
16 41. (previously presented) A computer-readable medium having a
17 computer program for responding to an XML request, the program comprising the
18 following steps:

19 receiving a client request;

20 determining an HTTP verb that is contained in the client request;

21 instantiating a request method object that corresponds to the HTTP verb
22 that is contained in the client request;

23 using the request method object to gather information that is to appear in an
24 XML response to the client's request;

1 making a series of calls to an emitter object that is configured to receive
2 information from the request method object and process the information into a
3 response portion having an appropriate XML syntactic format; and

4 sending the response portion to the client before the XML response is
5 entirely built.

6
7 42. (original) The program of claim 41, wherein the making of the series
8 of calls comprises doing so in a defined order.

9
10 43. (original) The program of claim 41 further comprising accumulating
11 response portions, said sending comprising sending accumulated response portions
12 to the client, the accumulated response portions constituting less than an entirety
13 of a complete client response.

14
15 44. (previously presented) A computer-readable medium having
16 software code that is configured to receive a request from a client and instantiate
17 an object that corresponds to an HTTP verb that is contained in the request, the
18 software code further using the object to build a portion of an XML response to
19 the request that is to be sent to the client before the XML response is entirely built.

20
21 45. (original) The software code of claim 44, wherein individual objects
22 that are instantiable by the software code are unique to an HTTP verb with which
23 it corresponds.

24

25

1 46. (original) The software code of claim 44, wherein the object is
2 configured to make calls to another object, the calls containing information that is
3 to be included in the XML response.

4
5 47. (original) The software code of claim 44, wherein the object is
6 configured to make calls to a second object, the calls containing information that is
7 to be included in the XML response, the second object being configured to format
8 the information into an appropriate syntactic form.

9
10 48. (previously presented) The method of claim 1, wherein repeating
11 said preparing and said sending further comprises preparing and sending portions
12 so that a hierarchical order of the entire XML document is preserved.

13
14 49. (previously presented) The method of claim 5, wherein sending the
15 response portion to the client further comprises sending the portion so that a
16 hierarchical order of the entire XML document is preserved.

17
18 50. (previously presented) The XML request processor of claim 31,
19 wherein the sending mechanism is further to send the response portions to the
20 client so that a hierarchical order of the entire XML document preserved.

21
22 51. (previously presented) The XML request processor of claim 37,
23 wherein the emitter object is further configured to the portion of the client
24 response so that a hierarchical order of an XML document forming the response is
25 preserved.

1
2 52. (previously presented) The program of claim 41, wherein sending
3 the response portion to the client further comprises sending the response portion so
4 that a hierarchical order of an XML document forming the response to the client's
5 request is preserved.

6
7 53. (previously presented) The software code of claim 44, wherein
8 sending the response portion to the client further comprises sending the response
9 portion so that a hierarchical order of an XML document forming the XML
10 response is preserved.

11
12 54. (previously presented) The method of claim 20 wherein said creating
13 a request method object further comprises creating a request method object for the
14 WebDAV request method responsive to determination of the WebDAV request
15 method.

16
17 55. (previously presented) The program of claim 41 wherein said
18 instantiating a request method object further comprises instantiating a request
19 method object that corresponds to the HTTP verb responsive to the determination
20 of the HTTP verb.